UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. |
|---|---|---|---|
| 09/502,899 | 02/11/00 | STOUT R | ADDS:017/KRE |

| EXAMINER | |
|---|---|
| SHAPIRO, J | |
| ART UNIT | PAPER NUMBER |
| 3651 | 5 |

PM82/0426

HUGH R.KRESS
WINSTEAD SECHREST & MINICK P.C.
910 TRAVIS,
SUITE 2400
HOUSTON TX 77002

DATE MAILED: 04/26/01

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 09/502,899 | STOUT ET AL. | |
| | Examiner | Art Unit | |
| | Jeffrey A. Shapiro | 3651 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *28 April 2000* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-50* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-50* is/are rejected.

7)☒ Claim(s) *43 and 48* is/are objected to.

8)☐ Claims _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved.

12)☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. § 119**

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☒ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

**Attachment(s)**

15) ☒ Notice of References Cited (PTO-892)
16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *4* .
18) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
19) ☐ Notice of Informal Patent Application (PTO-152)
20) ☐ Other: .

## DETAILED ACTION

### *Specification*

1. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

### *Claim Objections*

2. Claims 43 and 48 are objected to because of the following informalities: It appears that Claims 43 and 48 recite the same limitations. It appears that Applicant meant to depend Claim 43 from claim 42 and depend Claim 48 from Claim 46. Therefore, for the purposes of this action, Claim 48 will be treated as if it depends from Claim 46. Appropriate correction is required.

### *Claim Rejections - 35 USC § 112*

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> **The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.**

4. Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear what is meant by "measurements of past performance" recited in lines 2 and 3 of Claim 2. Past performance may be measured by word of mouth to the gasoline station manager, who inputs different ratios based upon previous results obtained from experiments with a new additive or under different driving conditions. The fuel dispenser could also change a mixture itself based upon

perceived losses of additive if, for example, the additive degraded a certain percentage over the distance it traveled to the mixture point or to a measurement point where the final mixture ratio could be assessed.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> **A person shall be entitled to a patent unless –**
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 2, 4, 6, 7, 10-12, 17-19, 21, 22, 24, 26, 27, 30-32, and 37-39, as understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Zinsmeyer US 5,163,586. Zinsmeyer '586 discloses the fuel additive dispensing system as follows.

As described in Claims 1 and 21;

1. a housing adapted to be affixed to a fuel dispenser having a fuel dispensing hose (note that fuel dispenser (1) has a housing);

2. a hydraulic module, disposed at least partially within said housing having a fluid input adapted to be coupled to at least one source of fuel (25) additive and a fluid output flow (note fuel tanks 28-30) adapted to be coupled to said fuel dispensing hose (20-22) to introduce said additive into a stream of fuel delivered through said fuel dispensing hose;

3. control circuitry (2 and 4), coupled to said hydraulic module, for generating electrical control signals applied to said hydraulic module to cause a controlled amount of said additive to be released from said at

least one source to flow through said fluid input and fluid output and into said fuel dispensing hose.

As described in Claims 2 and 22;

4. said controlled amount of additive is determined based upon measurements of past performance of said hydraulic module (note that the amounts of additive can be changed easily by changing the mixing ratios in the control computer based on prior reported performance of a particular mixture of additives and fuels, for example);

As described in Claims 4 and 24;

5. said hydraulic module further comprises a flow meter (23 and 26) coupled to said control circuitry for monitoring the flow of additive through said hydraulic module;

As described in Claims 6 and 26;

6. said controlled amount of additive is released in at least one increment into said stream of fuel;

As described in Claims 7 and 27;

7. said controlled amount of additive is released each time a predetermined amount of fuel is delivered through said fuel dispensing hose;

As described in Claims 10 and 30;

8. said at least one source of fuel additive is external to said housing;

As described in Claims 11 and 31;

9. said controlled amount of said additive is an amount proportional to a total amount of fuel in said stream of fuel;

As described in Claims 12 and 32;

10. said controlled amount of said additive is an amount specified by a user of said fuel dispenser (note that the operator could be construed as a user of said fuel dispenser);

As described in Claims 17 and 37;

11. a user interface (3) coupled to said control circuitry, wherein said control circuitry is responsive to a selection signal generated by said control circuitry to initiate dispensation of said fuel additive (note that said fuel additive is automatically dispensed with the fuel as the fuel is requested);

As described in Claims 18 and 38;

12. said user interface is responsive to user interaction to generate said selection signal;

As described in Claims 19 and 39;

13. said user interface is responsive to said user interaction occurring prior to said stream of fuel being delivered through said fuel dispensing hose to generate said selection signal;

As described in Claims 41 and 46;

14. said control circuitry is adapted to be coupled to a retail point-of-sale system (see abstract) including a point-of-sale server for controlling a fuel dispensing transaction;

As described in Claim 42 and 47;

15. fuel and said fuel additive are dispensed in a single integrated transaction;

As described in Claims 43 and 48;

16. a predetermined amount of said additive is dispensed;

As described in Claims 44 and 49;

17. the amount of additive dispensed is proportional to the amount of said fuel dispensed;

As described in Claims 45 and 50;

18. said control circuitry is responsive to at least one signal from said retail point-of-sale system to disable said fuel additive dispensing system (see Claim 5);

## *Claim Rejections - 35 USC § 103*

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 3, 5, 8, 9, 16, 20, 23, 25, 28, 29 and 40, as understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Zinsmeyer '586 in view of Leatherman et al '629. Zinsmeyer '586 discloses the fuel additive dispensing system as described above. Zinsmeyer '586 further discloses the following.

As described in Claims 3 and 23;

1. said fluid input comprises an input flow control manifold and said fluid output comprises an output flow control manifold (note that it is inherent that said fuel dispenser (1) will have an input and output flow control manifold, as is widely known in the art);

As described in Claims 5 and 25;

2. said hydraulic module operates to dispense said additive with an accuracy of at least approximately 0.75%. (Note that this accuracy is well known to those ordinarily skilled in modern digital control art and well within the means of performance of typical computer control dispensing devices. See also Column 2, lines 18-24, note in particular that the device of Zinsmeyer has accuracy of 0.4%.)

As described in Claims 20 and 40;

3. said user interface is responsive to said user interaction occurring while said stream of fuel is being delivered through said fuel dispensing hose to generate said selection signal (note that although said user input does not occur during delivery of said stream of fuel, this is a functional

equivalent of responding to said user interaction before said stream of fuel is delivered, as is described in Claim 19)

Zinsmeyer '586 does not expressly disclose the following.

As described in Claims 8 and 28;

4. a graphic display viewable by a user of said fuel dispenser;

As described in Claims 9 and 29;

5. at least one user-actuable control for activating said dispensing system to dispense said fuel additive into said stream of fuel;

As described in Claims 16 and 36;

6. said graphic display is responsive to said control circuitry to display a plurality of separate images thereon;

Leatherman et al '629 discloses a graphics based, internet based fuel dispenser having the following.

As described in Claims 8 and 28;

7. a graphic display viewable by a user of said fuel dispenser (38);

As described in Claims 9 and 29;

8. at least one user-actuable control (40 and 32) for activating said dispensing system to dispense said fuel additive into said stream of fuel;

As described in Claims 16 and 36;

9. said graphic display (38) is responsive to said control circuitry to display a plurality of separate images thereon;

Both Zinsmeyer '586 and Leatherman et al '629 are analogous art as they are both fuel dispensers having computer based control systems.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have integrated the computer based, internet based, graphics interface system of Leatherman et al '629 with the fuel dispenser of Zinsmeyer '586.

The suggestion/motivation for doing so would have been to improve customer and user interface with the system. See abstract of Leatherman et al '629 and note Zinsmeyer '586 is a fuel dispenser inherently used at a point of sale (a gas station) with routine access to customers.

Therefore, it would have been obvious to combine Zinsmeyer '586 with Leatherman et al '629 to obtain the invention as specified in Claims 3, 5, 8, 9, 16, 20, 23, 25, 28, 29 and 40.

Claims 13-15 and 33-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zinsmeyer '586 in view of Leatherman et al '629 and further in view of Comer et al.

Zinsmeyer '586 and Leatherman et al '629 disclose the fuel dispenser as described above. Zinsmeyer '586 and Leatherman et al '629 do not expressly disclose the following.

As described in Claims 13 and 33;

10. a proximity detector, coupled to said control circuitry, for detecting the presence of a person in the vicinity of said system;

As described in Claims 14 and 34;

11. said proximity detector applies a detection signal to said control circuitry upon detection of a person in the vicinity of said system;

As described in Claims 15 and 35;

12. said control circuitry is responsive to said detection signal to display at least one predetermined image on said graphic display;

Comer et al discloses a fuel dispenser having the following.

As described in Claims 13 and 33;

13. a proximity detector (75), coupled to said control circuitry, for detecting the presence of a person in the vicinity of said system;

As described in Claims 14 and 34;

14. said proximity detector (75) applies a detection signal to said control circuitry upon detection of a person in the vicinity of said system;

Regarding Claims 15 and 35, note that it would be expedient for one ordinarily skilled in the art to cause a predetermined image as disclosed in Leatherman et al '629 to be displayed based upon the detection of a customer at the fuel dispenser.

Zinsmeyer '586, Leatherman et al '629, and Comer et al are all analogous art as they all pertain to fuel dispensers.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have used a proximity detector such as that used by Comer et al in the device of Zinsmeyer '586 and Leatherman et al '629.

The suggestion/motivation for doing so would have been to detect the presence of a customer. See abstract of Comer et al.

Therefore, it would have been obvious to combine Comer et al with Zinsmeyer '586 and Leatherman et al '629 to obtain the invention as specified in Claims 3, 5, 8, 9, 16, 20, 23, 25, 28, 29 and 40.

***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Zinsmeyer '645, Young et al, Schulte et al, Bryan, III et al, Indey et al, Atchley et al, Rogers et al, Palozzi et al, Leatherman et al '781, Warn '861, Meyer et al, Kurowski et al, Buck et al, Royal, Jr. et al, Bates, Kaehler et al, McCall et al and Miller are all cited as examples of fuel dispensers.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey A. Shapiro whose telephone number is (703)308-3423. The examiner can normally be reached on 9:00 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher P. Ellis can be reached on (703)308-2560. The fax phone numbers for the organization where this application or proceeding is assigned are (703)308-0552 for regular communications and (703)308-0552 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-1113.

Jeffrey A. Shapiro
Patent Examiner,
Art Unit 3651

April 23, 2001

CHRISTOPHER P. ELLIS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600